## **SITE EVALUATION RISK CATEGORY DEFINITIONS\***

CATEGORY	LOW RISK (rank 1)	MODERATE RISK (rank 2)	HIGH RISK (rank 3)
Soils			
1. Soil permeability	Low (Clay Soils)	Moderate (Silty Soils)	High (Gravel, Sand, Fractured Media)
NRCS National Soils Handbook & County Surveys	0.06 – 0.20 in/hr	0.20 – 2.0 in/hr	> 2.0 in/hr
2. Soil depth	Deep (>60 in)	Moderate (20-60 in)	Shallow (0-20 in)
NRCS National Soils Handbook & County Surveys			
Thickness of thickest clay layer in the unsaturated zone	> 25 ft	10-25 ft	0 – 10 ft
U of I guidance & professional judgment			
<b>Ground Water</b>			
4. Depth to first encountered water	Deep (> 100 feet)	Moderate (25-100 feet)	Shallow (0-25 feet)
Ground water vulnerability assessment of Snake River Plain, 1991			
5. Mean nitrate-nitrogen level in ground water within a 5 mile radius	Low (0-3 mg/L)	Moderate (3-8 mg/L)	High (> 8 mg/L)
Low = IDEQ anthropogenic impact level with buffer, Moderate = Double the Low value and remain protective of EPA MCL			
6. Percentage of wells over 5mg/L nitrate in the same hydrologic basin within 5 miles	< 15%	15% - 35%	> 35%
DEQ Nitrate Priority Area methodology			
7. Aquifer geology	Clay, Unfractured igneous or metamorphic	Sandstone, Silt, Fractured Media	Gravels, Sand
Freeze (1979) & professional judgement			
8. Time of travel to a spring	Long (> 10 years)	Moderate (3-10 years)	Short (0-3 years)
DEQ Idaho Source Water Assessment Plan			

CATEGORY	LOW RISK (rank 1)	MODERATE RISK (rank 2)	HIGH RISK (rank 3)
Ground Water (continued)			
Downgradient distance to nearest domestic well	Large (1000 feet or greater)	Moderate (100 – 1000 feet)	Short (< 100 feet)
DEQ Idaho Well Head Protection Program, Idaho HomeASyst			
10. Source water delineation area time of travel zone	Long (> 10 years)	Moderate (3-10 years)	Short (≤3 years)
DEQ Idaho Source Water Assessment Plan			
Surface Water			
11. Downgradient distance from CAFO boundary to nearest surface water body	> 200 ft	100 – 200 ft	< 100 feet
EPA December 2004 Guidance			
12. Downgradient distance from land application area to nearest surface water body	> 200 ft	100 – 200 ft	< 100 feet
EPA December 2004 Guidance			
13. 100-year floodplain	Not within 100-year floodplain		Within 100-year floodplain
FEMA: National Flood Insurance Program			
Nutrient Transport			
14. Run-on	Professional judgment based on field evaluation, mapping, etc.	Professional judgment based on field evaluation, mapping, etc.	Professional judgment based on field evaluation, mapping, etc.
Physical Inspection, Topography, Drainage			
15. Surface Runoff	Negligible, Very Low, Low	Medium	High, Very High
NRCS National Soils Handbook & County Surveys <sup>1</sup>			
16. Annual precipitation	Dry (< 10 in/yr)	Moderate (10-20 in/yr)	Wet (>20 in/yr)
Precipitation Map – Oregon State Climate Service			

<sup>\*</sup>Risk score for categories is subject to change due to field truthing and professional judgment.

<sup>&</sup>lt;sup>1</sup>NRCS surface runoff classes are based on slope, climate, and vegetative cover.